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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,823	10/30/2003	Karine Marion	114120	7973
25944	7590	05/01/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER WARE, DEBORAH K	
			ART UNIT 1651	PAPER NUMBER
			MAIL DATE 05/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/695,823	Applicant(s) MARION, KARINE	
	Examiner Deborah K. Ware	Art Unit 1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-28 is/are pending in the application.
- 4a) Of the above claim(s) 11-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-10 and 23-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1 and 3-28 are pending.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in France on October 31, 2002. It is noted that applicant has filed a certified copy of the 02.13963 application as required by 35 U.S.C. 119(b) on February 28, 2007. Further, the application claims priority benefit of 60/422,508 filed October 31, 2002.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on December 23, 2004 was received. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Amendment

The amendment and extension of time therewith filed February 5, 2007, has been received and entered. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election

The amendments to all claims are noted, however, claims 11-22 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being *no allowable* generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on July 18, 2006. Claims 1, 3-10 and 23-28 are reconsidered on the merits.

However, even though, the examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are *subsequently found allowable*, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.** Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Applicant's amendments of February 5, 2007, in accordance with the above notification regarding rejoinder of claims are acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-10 and 23-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 3-10 and 23-28 are rendered vague and indefinite for failing to recite clear and distinct process steps wherein it is unclear in step c) what is intended by circulation. What does this term mean in step d)? The metes and bounds of the claim can not be determined. Further, the steps for preparing are not described and clearly set forth in the claims.

Response to Arguments

Applicant's arguments filed February 5, 2007, have been fully considered but they are not persuasive. The arguments that the specification describes the process steps of circulation and preparing steps are acknowledged. However, the claims are interpreted in light of the specification, and limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, the claims must clearly and distinctly describe the particulars of the claimed invention and hence the method steps as recited and claimed herein must

particularly point out and distinctly describe the claimed invention. While the claims are read in light of the specification the claimed subject matter must still clearly and distinctly describe the claimed invention, such as the steps for preparing the solution and circulating step, all of and each of the claimed process steps, etc. Thus, this rejection is sustained.

The claims are identical to the teachings of Xu and are considered to be anticipated by the teachings therein. Furthermore, in terms of the washing step, although the reference teaches contacting step, the presence of the detergent would inherently include washing to be a function of the disclosed contacting step.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-10 and 23-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu (US 6,777,223), in view of Barbeau et al (US 6,762,160) and Carpenter et al (US 5,238,843), and **newly cited** Cermenati et al (US 6,992, 053) all cited of record and **newly cited** reference on enclosed PTO-892 Form.

Claims are drawn to method of removing a biofilm, and are further drawn to an enzyme mixture which is pancreatin (a protease), a disinfectant (hypochlorite) and an acid for removing the deposits that is citric acid.

Art Unit: 1651

Xu teaches method of removing a biofilm comprising carrying out by washing a surface to be treated with a) a solution comprising an enzyme mixture (see columns 7-9, lines 15-65) of proteases (see also column 8, line 23), esterases (see column 7, line 44), lipases, galactosidase, and amylase (column 9, line 56), and b) applying an alkaline solution of detergent containing surfactant (see column 7, lines 15-25). Further, amino acids are disclosed to be present or prepared in response to enzymatic activity of the solution, note column 4, lines 20-30. Each of trypsin (see column 8, line 24), galactosidase (see column 7, line 45), ribonuclease (see column 7, line 48), lipase (see column 9, line 38), etc. are well known.

Claims differ from Xu in that pancreatin, alkali hypochlorites (sodium and potassium) and citric acid are not disclosed.

Barbeau et al teach citric acid (note column 7, line 57 and column 8, lines 58-63) and disinfectant (note column 8, lines 58-67 and column 9, line 1). Sodium hypochlorite is disclosed at column 4, lines 2-3.

Carpenter et al teach pancreatin to be useful enzyme for treating a surface that contain biofilms, note column 1, line 58 and column 16, line 34. Glycosidase is disclosed at column 1, line 23.

Cermenati et al teach method of treating surfaces with potassium hypochlorite, note column 5, lines 47-48. They also teach that citric acid is capable of exhibiting good limescale removing performance whilst exhibiting also good disinfecting properties, note column 4, lines 14-17 and lines 23-24.

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to combine the teachings of Xu, Barbeau et al, Carpenter et al and Cermenati et al, in order to provide a mixture for removing biofilms from a surface because each of pancreatin, hypochlorite and citric acid, as well as potassium hypochlorite, have all been used for the same purpose, and washing surfaces and removing biofilms, therefrom.

Solutions of surfactants, mixture of enzymes, and salt forming acids are all well known for the purpose of degrading or removing biofilms. Furthermore, additional additives such as disinfectants, and the like are well known to be added thereto as well. To combine these all for purpose of achieving an enhanced effect for removing a biofilm is clearly within the skill of an skilled artisan in the art and an obvious modification of the cited prior art.

Therefore, one of ordinary skill in the art would have expected successful results applying these solutions and mixture to a surface by washing the surface. Clearly one of skill would have been motivated to select citric acid, hypo-chlorite and pancreatin because each of them are well known for such purpose as indicated and taught in the cited prior art. In the absence of persuasive evidence to the contrary the claims are deemed prima facie obvious.

Response to Arguments

Applicant's arguments filed February 5, 2007, have been fully considered but they are not persuasive. The argument that citric acid as disclosed by Barbeau is not capable of dissolving deposits of a mineral salt for use in a method of removing a biofilm

Art Unit: 1651

as now required of claim 1 is noted. However, citric acid as disclosed by Barbeau has all of the same properties as the citric acid being claimed and used in Applicants' claimed method and hence would have been expected to be capable of dissolving deposits of a mineral salt. Furthermore, this is clearly taught by newly cited Cermenati et al at column 4, lines 14-17 and lines 23-24. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1651

Conclusion

All claims fail to be patentably distinguishable over the state of the art discussed above and cited on the enclosed PTO-892 and/or PTO-1449. Therefore, the claims are properly rejected.

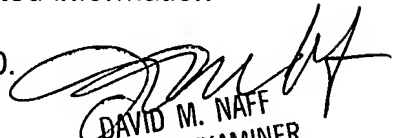
No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 571-272-0924. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Deborah K. Ware
April 28, 2007


DAVID M. NAFF
PRIMARY EXAMINER
ART UNIT 128
1651